UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

DATE: November 29, 2006

SUBJECT: Inspection Report for Appleton Papers
West Carrollton, Ohio

FROM: Sheila Desai, Environmental Engineer
Air Enforcement and Compliance Assurance Section (MN/OH)

TO: Files

THRU: William MacDowell, Section Chief
Air Enforcement and Compliance Assurance Section (MN/OH)

INSPECTION DATE(S)

October 10, 2006

FACILITY ADDRESS

Appleton Papers, Inc.
1030 West Alex-Bell Rd.
West Carrollton, Ohio 45449

Primary SIC Code: 2672 - Coated and Laminated Paper, not elsewhere classified

PARTICIPANTS

Appleton Papers
Nancy McDonnell - Environmental Manager

United States Environmental Protection Agency
Sheila Desai, Environmental Engineer
Julie Morris, Environmental Scientist

Regional Air Pollution Control Agency
Andrew Weisman - Air Pollution Control Specialist

BACKGROUND

The United States Environmental Protection Agency Region 5 (U.S. EPA) conducted an inspection at Appleton Papers (Appleton) in

West Carrollton, Ohio on October 10, 2006. Appleton is a paper mill which makes various types of papers. Appleton is headquartered in Appleton, Wisconsin.

Appleton is located in West Carrollton, Ohio about 10 miles south of Dayton. The facility is located in town with residences nearby.

OBJECTIVES

The purpose of this inspection was to gather information relative to the determination of compliance with the Clean Air Act and the Ohio State Implementation Plan (SIP).

APPLICABLE RULES

The following regulations promulgated under the CAA may apply to Appleton:

40 C.F.R. §70.1 *et seq.* - "State Operating Permit Programs" provides certain requirements related to applying for and issuing Title V permits.

40 C.F.R. §63.440 *et seq.* - "Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry"

40 C.F.R. §63.7480 *et seq.* - "Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters"

A Title V operating permit, bearing permit number 08-57-19-0001, was issued to Appleton on November 14, 2001. This permit summarizes applicable state and federal regulations for this facility.

STATE NOTIFICATION OF INSPECTION

Mr. Andrew Weisman of the Regional Air Pollution Control Agency (RAPCA) was contacted on October 3, 2006 regarding the inspection.

OFF-SITE OBSERVATIONS OF PLANT:

As the U.S. EPA representatives approached the facility by car, no odor was detected.

ARRIVAL

The U.S. EPA representatives arrived at Appleton at approximately 1:00 p.m. on October 10, 2006 to conduct an unannounced air compliance inspection. The team entered the guard building and explained the purpose of the visit to the receptionist. Mr. Weisman of RAPCA met the U.S. EPA representatives at the guard building. The guard directed the team to go toward Ms. McDonnell's office. U.S. EPA arrived at Ms. McDonnell's office, presented their credentials and explained the purpose of the visit.

OPENING CONFERENCE

U.S. EPA stated that the inspection would consist of an opening conference with a process description, then a plant tour, and then a review of some on-site records. U.S. EPA also informed Ms. McDonnell of the company's right to make a claim of confidential business information (CBI) if, at any time, we discuss or view some process or documents that they believe should be treated as CBI. Ms. McDonnell began with a brief history of the company and a description of the process.

HISTORY AND BACKGROUND

The facility was constructed in the late 1940's starting with one paper machine and one boiler. In the 1960's, the facility expanded and added two more paper machines. The facility was purchased by Appleton Papers in September, 1984. Appleton Papers was founded in 1907 in Appleton, Wisconsin and employs approximately 3,300 people world wide.

Appleton has approximately 400 employees at the West Carrollton facility and normally operates 24 hours a day, 7 days a week with three 8 hour shifts.

PROCESS DESCRIPTION

Waste paper is purchased mostly from printers and is brought in by rail. The paper is pre-consumer and consists of books, manuscripts, coupons, newspapers, etc. Virgin pulp also comes in by rail cars. Elemental chlorine comes in by rail cars and up to two rail cars are stored on site. Bleach and sodium bromide comes in by trucks.

The waste paper is loaded into the pulper and cleaned to wash dirt and surfactants off. The waste paper pulp is then bleached to improve brightness. Appleton makes their own bleach the majority of the time, however if their system is down, bleach is purchased and arrives by truck. There are 3 stages for bleaching. The first stage is chlorination which is vented to a scrubber. The second stage is the sodium hydrochloride bleach stage which is also vented to the scrubber. In the third stage sodium hydroxide reacts with chlorine to form sodium hypochlorite and then washed with water. Counter current with the sodium hypochlorite stage, the waste paper pulp goes to the centrifugal cleaners which cleans the dirt and contaminants out of the pulp.

The waste paper pulp then goes to the pulpers where it is blended with virgin pulp and beat to make slurry. Calcium carbonate and retention aides are mixed in.

The pulp is then dewatered where a vacuum is used to pull the water out of the fiber and the fiber is left on a fine mesh screen.

The fiber is dried using steam heated cans on one line and natural gas driers on the other two lines. The fiber bonds together and paper is formed. There are three on machine coaters which use water based coatings and apply coatings to the paper depending on the product. The paper reels off the paper machine are put to smaller rolls and then shipped.

There are two coal fired boilers and one natural gas boiler at the facility. Ms. McDonnell stated that the natural gas boiler is on stand by and is occasionally used in winter. Both coal fired boilers have weighted wires ESP's and multi-clones.

PLANT TOUR

The plant tour began at 2:45 pm in the ESP control room at the power house. The boilers and the steam turbine were viewed next. The turbine is rated at 14,733 kW and the boilers are rated at 129 mmBtu/hr and 156 mmBtu/hr. The tour continued outside to the silos and rail car and truck unloading area. The storage area in side the plant which contained purchased waste paper and virgin pulp was viewed next. The waste paper loading area and the chlorine scrubber were viewed. The team entered the control room for the scrubber. At the time of the tour, the caustic

recirculation flow was 104.6 GPM, the pH was 11.1 and the airflow was 6,118 scfm.

The tour continued by the bleaching area to the pulpers and then to each paper machine line. The tour ended at 3:45 pm.

CAPTURE AND CONTROL EQUIPMENT

U.S. EPA asked about the capture and control equipment at the facility. Ms. McDonnell stated that there were two ESP's for the boilers which have had repairs. The controls and stack monitors have been replaced. Both ESP's have 2 sections. The #2 boiler ESP is 6,480 sqft and the #4 boiler ESP is 7,920 sqft. There is a scrubber in the recycle plant for the bleaching process, a baghouse on the fly ash silo, 2 baghouses on the starch silo, and 2 baghouses on the pneumatic clay silos.

PERFORMANCE TESTS

A performance test was performed on October 12, 1999 to show compliance with 40 C.F.R. Part 63, Subpart S. The test showed that the scrubber had 99.5% removal efficiency and an outlet concentration of 0.455 ppm for chlorine. It also showed a 71.6% removal of HCl with a concentration of less than 0.256 ppm. The HCl concentration was below the detection limit of 0.6 milligrams per sample. The moisture was 3.8%.

EXPANSIONS AND MODIFICATIONS

U.S. EPA asked about expansions and modifications that occurred at the facility in recent years. Ms. McDonnell mentioned the following changes:

- 1996: No. 93 new coater rebuild - allowed to apply coating on both sides of the sheet which let them make coated front and back paper instead of just coated front and coated back paper.
- 2001: Added ansilex clay system
- 2003: Added dry flash unloading

CFCs

Ms. McDonnell stated that they do have units over 50 lbs containing R-22. The units are used for cooling water rolls and motor control centers. They are contracted out and serviced by Carrier AC.

WASTEWATER TREATMENT

Ms. McDonnell stated that Appleton has a wastewater treatment plant which is located about 1.5 miles across town. Wastewater is piped under the city from the paper plant to wastewater treatment plant. The average flowrate of the plant is 7.5 MGD. Ms. McDonnell stated that since 1980, they have added ferric sulfate, a 2nd belt press, a screw press, step feed and rebuilt the clarifiers. The major pieces of equipment at the facility are 2 clarifiers (0.6 MG), an aeration lagoon (7 MG), 2 secondary clarifiers (0.8 MG), and a polishing basin (11.5 MG).

CLOSING CONFERENCE AND FILE REVIEW

For the file review, U.S. EPA asked to review the FEE emission reports and supporting calculations, deviation and excess emission reports, opacity reports, daily records, sulfur content of coal used, and CFC records for the facility.

U.S. EPA told Appleton that an inspection report would be written and if they would like a copy that they could request it through a Freedom of Information Act request. U.S. EPA also stated that a Section 114 Request for Information will be sent requesting more information from the company regarding CFCs, emission calculations, and deviation reports. Nothing further was discussed.